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Governor

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NEW MEXICO ENVIRONMENT DEPARTMENT

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BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Acting Deputy Secretary

Certified Mail – Return Receipt Requested

November 28, 2016

Ms. Maria Gilvarry, Utilities Director
1700 North Grand Avenue
Las Vegas, NM 87701

Re: City of Las Vegas Wastewater Treatment Facility; Major; Municipal Individual Permit; SIC 4952; Compliance Evaluation Inspection; NPDES Permit NM0028827; November 3, 2016

Dear Ms. Gilvarry:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

NPDES Enforcement Coordinator
Environmental Protection Agency, Region 6
NPDES Enforcement Branch (6EN-WM)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Program Manager
New Mexico Environment Department
Surface Water Quality Bureau (N2050)
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

David Long is USEPA Region 6's Acting NPDES Enforcement Coordinator at the above address.

City of Las Vegas Wastewater Treatment Facility

November 28, 2016

Page 2 of 2

If you have any questions about this inspection report, please contact Jennifer Foote at (505)827-0596 or at Jennifer.Foote@state.nm.us.

Sincerely,

/s/ Sarah Holcomb

Sarah Holcomb
Acting Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Carol Peters-Wagnon, USEPA (6EN-WM), by e-mail
David Long, USEPA (6EN-WM), by e-mail
Brent Larsen, USEPA (6WQ-PP), by e-mail
Nichole Young, USEPA (6WQ-PP), by e-mail
Gladys Gooden-Jackson, USEPA (6EN-WC), by e-mail
Robert Italiano, NMED District II, by e-mail
Ron Lujan, City of Las Vegas, by e-mail
Robert Espinoza, City of Las Vegas, by e-mail



Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 2 8 8 2 7 11 12 1 6 1 1 0 3 17 18 C 19 S 20 1					
Remarks					
M A J O R W W T P					
Inspection Work Days		Facility Evaluation Rating		BI QA Reserved	
67 69		70 3		71 N 72 N 73 74 75 80	

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) Las Vegas WWTP I-25 North, Exit 343, East on frontage road, Travel South to WWTP Entrance. San Miguel County	Entry Time /Date 0925 hours 11-3-16	Permit Effective Date October 1, 2011
	Exit Time/Date 1450 hours 11-3-16	Permit Expiration Date September 30, 2016 (Administratively continued)
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Ron Lujan, Plant Manager, Rlujan@ci.las-vegas.nm.us Robert Espinoza, Utility Superintendent / (505) 426-3334 / roberte@ci.las-vegas.nm.us		Other Facility Data SIC : 4952 Lat.: 35.566577 Long.: -105.211771 GPS at outfall 001
Name, Address of Responsible Official/Title/Phone and Fax Number Maria Gilvary, Utilities Director / (505) 426-3310 1700 North Grand Avenue Las Vegas, NM 87701		
		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	U	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	S	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	M	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

See attached sheets.

Name(s) and Signature(s) of Inspector(s) Jennifer Foote /s/ Jennifer Foote	Agency/Office/Telephone/Fax NMED/SWQB 505-827-0596	Date 11/28/16
Signature of Management QA Reviewer Sarah Holcomb, Acting Program Manager /s/ Sarah Holcomb	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-827-2798	Date 11/28/16

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS
DETAILS:

☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO)

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE

☒ Y ☐ N ☐ NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES

☐ Y ☐ N ☒ NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT Permit location is incorrect, outfall 35°33'59.68", -105°12'42.37" ☐ Y ☒ N ☐ NA

4. ALL DISCHARGES ARE PERMITTED **Permit administratively continued**

☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.
DETAILS:

☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED Yes)

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.

☒ Y ☐ N ☐ NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

☒ S ☐ M ☐ U ☐ NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING

☒ Y ☐ N ☐ NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

☒ Y ☐ N ☐ NA

c) ANALYTICAL METHODS AND TECHNIQUES.

☐ Y ☒ N ☐ NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

☒ Y ☐ N ☐ NA

e) DATES AND TIMES OF ANALYSES.

☒ Y ☐ N ☐ NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

☒ Y ☐ N ☐ NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

☒ S ☐ M ☐ U ☐ NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR

☒ S ☐ M ☐ U ☐ NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.

☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.
DETAILS:

☐ S ☒ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED Yes)

1. TREATMENT UNITS PROPERLY OPERATED.

☐ S ☒ M ☐ U ☐ NA

2. TREATMENT UNITS PROPERLY MAINTAINED.

☐ S ☒ M ☐ U ☐ NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.

☒ S ☐ M ☐ U ☐ NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.

☒ S ☐ M ☐ U ☐ NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE.

☐ S ☒ M ☐ U ☐ NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.

☐ S ☐ M ☒ U ☐ NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.

☐ S ☐ M ☒ U ☐ NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.

☒ Y ☐ N ☐ NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

☒ Y ☐ N ☐ NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.

☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? ☒ Y ☐ N ☐ NA
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? ☒ Y ☐ N ☐ NA
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS? ☒ Y ☐ N ☐ NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? ☐ Y ☒ N ☐ NA
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT? ☐ Y ☐ N ☒ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO.)
 DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. ☒ Y ☐ N ☐ NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. ☒ Y ☐ N ☐ NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT. ☒ Y ☐ N ☐ NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. ☒ Y ☐ N ☐ NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT. ☒ Y ☐ N ☐ NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE ☒ Y ☐ N ☐ NA

a) SAMPLES REFRIGERATED DURING COMPOSITING. ☒ Y ☐ N ☐ NA

b) PROPER PRESERVATION TECHNIQUES USED. ☒ Y ☐ N ☐ NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. ☒ Y ☐ N ☐ NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? ☐ Y ☐ N ☒ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED No.)
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. ☒ Y ☐ N ☐ NA
 TYPE OF DEVICE **2' Cipolletti Weir**

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. ☒ Y ☐ N ☐ NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. ☒ Y ☐ N ☐ NA

4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION 9-23-16) ☒ Y ☐ N ☐ NA
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES. ☐ Y ☒ N ☐ NA
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. **No calibration checks performed.** ☐ Y ☒ N ☐ NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. ☒ Y ☐ N ☐ NA

6. HEAD MEASURED AT PROPER LOCATION. ☒ Y ☐ N ☐ NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. ☒ Y ☐ N ☐ NA

SECTION F - LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. ☐ S ☒ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED YES.)
 DETAILS: BOD, pH, TSS, Ecoli performed onsite

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES) ☐ Y ☒ N ☐ NA

SECTION F - LABORATORY (CONT'D)2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED ☐ Y ☒ N ☐ NA3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☒ S ☐ M ☐ U ☐ NA4. QUALITY CONTROL PROCEDURES ADEQUATE. ☐ S ☒ M ☐ U ☐ NA5. DUPLICATE SAMPLES ARE ANALYZED. 0 % OF THE TIME. pH ☐ Y ☒ N ☐ NA6. SPIKED SAMPLES ARE ANALYZED. 0 % OF THE TIME. ☐ Y ☒ N ☐ NA7. COMMERCIAL LABORATORY USED. **DMR-QA Study Program** ☒ Y ☐ N ☐ NA

LAB NAME

BioAquatic

Hall Environmental

LAB ADDRESS

2501 Mayes Rd Ste 100, Carrollton TX 75006

4901 Hawkins NE / Albuquerque, NM 87109

PARAMETERS PERFORMED

WET

Ammonia, Aluminum, Cadmium

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	None	None	None	None	None	clear	

RECEIVING WATER OBSERVATIONS

AO issued in January 2016 for exceedances of total aluminum. Since then facility had additional Al exceedances in May and June 2016. July through September were within limits.

SECTION H - SLUDGE DISPOSALSLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO).
DETAILS:1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ☒ S ☐ M ☐ U ☐ NA2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. ☒ S ☐ M ☐ U ☐ NA3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: Surface Disposal (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED NO).1. SAMPLES OBTAINED THIS INSPECTION. ☐ Y ☐ N ☒ NA

2. TYPE OF SAMPLE OBTAINED

GRAB _____ COMPOSITE SAMPLE _____ METHOD _____ FREQUENCY _____

3. SAMPLES PRESERVED. ☐ Y ☐ N ☒ NA4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ☒ NA5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ☒ NA6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE. ☐ Y ☐ N ☒ NA7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☒ NA8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☒ NA9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☒ NA

**Compliance Evaluation Inspection
City of Las Vegas Wastewater Treatment Facility
NPDES Permit No. NM0028827
Inspection Date: November 3, 2016
Further Explanations**

INTRODUCTION:

On November 3, 2016, Jennifer Foote and Daniel Valenta of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the City of Las Vegas Wastewater Treatment Plant (WWTP). This facility is classified as a major municipal POTW under the federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit number NM0028827. The permit lists the facility design flow as 2.5 million gallons per day (MGD). The permit is currently administratively continued. The facility stated they were still working on their 2015 MSGP application and SWPPP.

The City of Las Vegas Wastewater Treatment Plant discharges into the Pecos River Basin in Segment 20.6.4.220 Gallinas River (Perennial prt Aguilar Creek to Pecos Arroyo), (NMAC State of New Mexico Standards for Interstate and Intrastate Surface Waters). Designated uses of segment 20.6.4.220 are irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact. This segment is listed (2016-2018 State of New Mexico Clean Water Act (CWA) §303(d)/§305(b) Integrated Report and List) as impaired for nutrient/eutrophication, temperature and turbidity.

The NMED performs a certain number of inspections for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by NMED staff, and records and reports kept by the permittee and/or NMED.

INSPECTION DETAILS:

The inspectors arrived at the City of Las Vegas Wastewater Treatment Facility at 0925 hours and made introductions, stated the purpose of the inspection, and Ms. Foote presented credentials to Mr. Robert Espinoza, Utility Superintendent. A new GPS reading was taken at the outfall location. The Inspectors and Mr. Espinoza toured the facility and were joined by Plant Manager Mr. Ron Lujan. An exit conference was conducted with Mr. Lujan and Mr. Espinoza.

TREATMENT SCHEME:

Raw wastewater enters the plant via a 12 inch Parshall flume with a pulsar electrosonic totalizer, passes through an automated bar screen and a grit removal system. The solids are then sent to the grit classifier, where the influent is sent through the plant, while the heavy organic material and grit is washed and deposited in a dumpster for final disposal at a landfill. The last unit in the headworks is a grease removal unit.

Formerly, the facility had two primary clarifiers that have been off-line in their new treatment scheme since 2008. The old racetrack aeration basin is used as emergency overflow capacity. From the headworks, wastewater travels to the east and west aeration basins for treatment. The 22 feet deep aeration (AB) basins have an aerobic zone, an intermediate zone and an anoxic zone. The facility has three blowers to provide air to the system. The blowers are not variable speed blowers and are oversized, so it is not possible to maintain the dissolved oxygen at a steady state throughout the night when the facility is unstaffed. Decant flows by gravity to the two secondary clarifiers. Following the clarifiers is an inline micro filtration system. The operator stated that in the past they took the filters offline for the winter, but they are going to try to use them this winter. Effluent passes through the ultraviolet disinfection system and flows through the 2' Cipolletti weir and secondary totalizer to the outfall located on the bank of the Gallinas River. The permittee collects its effluent samples just above the weir. Reuse water is diverted before the weir and chlorinated before storage on-site, the reuse season ends October 31.

SLUDGE:

Waste Activated Sludge (WAS) is pulled from the aeration basins and sent to the aerobic digesters. A new dewatering centrifuge was installed in the last month and is still being adjusted for peak performance. Final disposal is at a surface disposal site owned by the city. The sludge taken to the surface disposal site has a percent solids concentration of approximately 2-3%.

SEPTAGE RECIEVING: No monitoring of haulers is conducted.

FINDINGS:

Section B – Recordkeeping and Reporting Evaluation – Overall Rating of “Satisfactory”.

The permit states, in Part I, 1 Footnotes:

**3 Prior to final disposal, the effluent shall contain NO MEASURABLE total residual chlorine (TRC) at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR 136. If during the term of this permit, the minimum quantification level for TRC becomes less than 11 ug/l, then 11 ug/l shall become the effluent limitation. The maximum TRC shall be monitored by instantaneous grab sample on a daily basis. TRC shall be measured during periods when chlorine is used as either backup bacteria control, when disinfection of plant treatment equipment is required or when used for filamentous control. Regulations at 40 CFR Part 136 define "instantaneous grab" as analyzed within 15 minutes of collection. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.*

The permit states, in Part II, A:

MINIMUM QUANTIFICATION LEVEL (MQL)

See list of MQL's at Appendix A of Part II below. For pollutants listed on Appendix A of Part II below with MQL's, analyses must be performed to the listed MQL. If any individual analytical test result is less than the MQL listed, a value of zero (0) may be used for that pollutant result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

The permit states, in Part III, C.4.:

RECORD CONTENTS

Records of monitoring information shall include:

- e. The analytical techniques or methods used;*

Findings for Recordkeeping and Reporting:

- The facility reports zero on the DMR during times they are not using Chlorine but does not add a note that it is not being measured at that time. It is unclear when the facility is not measuring Chlorine and reporting zero or when they are reporting as zero due to minimum quantification levels. Adding a note in the comments section of the DMR would resolve the confusion. The operator stated they had not been testing for Chlorine but were now using it to control bacteria.
- Bench sheet states pH method is Standard Methods, 20th Ed, pages 4-68 through 4-69. Those pages describe methods for Chloride and not method 4500-H+.

Section C – Operation and Maintenance Evaluation – Overall Rating of “Unsatisfactory”.

The permit requires, in Part III, B.3.:

3. PROPER OPERATION AND MAINTENANCE

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

Findings for Operation and Maintenance:

- The aeration basin blowers are not variable speed blowers and it is difficult to maintain the dissolved oxygen at a steady state. The operator stated that during the evening hours the dissolved oxygen can climb up to as much as 4.0 mg/L and while staff is at the facility it is maintained at 1.5 to 2.5 mg/L by manually adjusting the aeration. The operator stated that there is also some short circuiting in aeration basins in the morning when flows are high and having the primary clarifiers back online would help absorb the morning flows.
- The permittee stated that about a month ago they suspect that there was a bad septage dump that led to a minor upset and the foam on the aeration basin. They are now having to use chlorine as a process control

for filamentous bacteria. The operator stated that they do not test the septage, monitoring of pH is important as septage treated at a wastewater treatment facility has the potential to upset processes if the septage addition is not properly controlled.

- Many floatables were noted in the secondary clarifiers. The operator stated that a new muffin muncher at the jail has increased the amount of small debris in the influent. The facility has two primary clarifiers that have been off-line in their new treatment scheme since 2008. Staff at the facility has stated that it would help in operation of the plant if the primary clarifiers were put back into the treatment train. The primary clarifiers would allow more settling to occur prior to entering the aeration and secondary clarifiers.
- The ultraviolet disinfection system has two banks with a total of ten modules. During the inspection the panel showed a low UV alarm. They are waiting on parts and the manufacturer is scheduled to come onsite and provide training.
- The facility does not have enough certified lab technician/operators to properly maintain and operate this size and type of facility.

Section F – Laboratory Evaluation – Overall Rating of “Marginal”.

The permit states in Part III.C.5. Monitoring Procedures:

- a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.*
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.*

Findings for Laboratory

- During review of the lab procedures, the laboratory personnel stated they were still utilizing the old EPA method for TSS analysis, which utilizes the “shake and pour” technique for filtering the sample. The current approved method for TSS in Part 136 is the Standard Methods version, SM 2540D-1997. This method requires the analyst to pipette the sample into the filtering mechanism.
- The permittee stated that they are using chlorine as a process control for filamentous bacteria, but has not sampled for chlorine. The permittee is required to sample for Total Residual Chlorine (TRC) when used.
- The operator stated that they were planning to update their QA/QC procedures to better reflect actual lab procedures and requirements.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Jennifer Foote

Date: 11/3/16

Time: 10:26am

City/County: Las Vegas/San Miguel

State: New Mexico

Location: Las Vegas WWTP

Subject: Foam on aeration basin



**NMED/SWQB
Official Photograph Log
Photo # 2**

Photographer: Daniel Valenta	Date: 11/3/16	Time: 10:38am
City/County: Las Vegas/San Miguel	State: New Mexico	
Location: Las Vegas WWTP		
Subject: Clarifier with floatable debris and algae on the weir teeth		



**NMED/SWQB
Official Photograph Log
Photo # 3**

Photographer: Daniel Valenta	Date: 11/3/16	Time: 10:57am
City/County: Las Vegas/San Miguel		State: New Mexico
Location: Las Vegas WWTP		
Subject: UV panel showing low UV dose alarm		



**NMED/SWQB
Official Photograph Log
Photo # 4**

Photographer: Jennifer Foote	Date: 11/3/16	Time: 10:51am
City/County: Las Vegas/San Miguel	State: New Mexico	
Location: Las Vegas WWTP		
Subject: sampling location at effluent flume		



**NMED/SWQB
Official Photograph Log
Photo # 5**

Photographer: Daniel Valenta	Date: 11/3/16	Time: 9:50am
City/County: Las Vegas/San Miguel	State: New Mexico	
Location: Las Vegas WWTP		
Subject: outfall (from the left) to river		

